delete - do not use in new Sequence Rules format

~~SEQUENCE LISTING~~

Does Not Comply
Corrected Diskette Needed

<110> ~~APPLICANTS:~~ ↑ move up to <1107 line
~~(A)~~ Jobling, Stephen Alan
~~(B)~~ Safford, Richard

<120> ~~TITLE OF INVENTION:~~ Improvements in or Relating to Starch Content of Plants

<130> Case 1637

<140> US 09/297,703

<141> 1999-07-19

<150> PCT/GB97/03032

<151> 1997-11-04

<160> 36

<170> Microsoft WORD 97

Do NOT use alphabetical headings when employing new Sequence Rules format.

<210> ~~SEQ ID NO: #~~1

<211> ~~LENGTH:~~ 20 ~~base pairs~~

<212> DNA

<213> Manihot, esculenta

<220>

<221>

<222>

<223>

delete, if no responses on <221>, <222>, or <223>

<300> WO 98/20145 published 1998-05-14

see next page - do not insert responses to <3007. <3007 is a "header" only Keep as <3007

<301>

<302>

<303>

<304>

<305>

<306>

<307>

<308>

delete - no responses

09/297,703

2

RECEIVED
MAY 0 2 2001
TECH CENTER 1600/2900

<309> delete

<310> WO 98/20145

<311> delete

<312> 1998-05-14

<313> delete

<400> ~~SEQ ID NO: #1~~
ATGGACAAGG ATATGTATGA 20

use lower-case letters when Sequence Listing is in new Sequence Rules format

<210> ~~SEQ ID NO: #2~~

<211> ~~LENGTH:~~ 20 ~~base pairs~~

<212> DNA

<213> Manihot, esculenta

<220>

<221>

<222>

<223>

delete, if no <221>, <222>, or <223> response

<300> ~~WO 98/20145 published 1998-05-14~~ Keep <3007 WITHOUT response

<301>

<302>

<303>

<304>

<305>

<306>

<307>

<308>

<309>

delete

<310> WO 98/20145

<311> delete

<312> 1998-05-14

<313> delete

<400> ~~SEQ ID NO: #2~~
GGTTTCATGA CTTCTGAGCA use lower-case letters

20

These pages are given as a sample of globally erored format.

see next pages

09/297,703 4

<210> ~~SEQ ID NO: #~~29

<211> ~~LENGTH:~~ 837 ~~amino acids~~ 836 (p.7)

<212> PRT

<213> Manihot, esculenta

<220>

<221>

<222>

<223>

delete

<300> ~~WO 98/20145 published 1998-05-14~~

<301>

<302>

<303>

<304>

<305>

<306>

<307>

<308>

<309>

delete

<310> WO 98/20145

<311> delete

<312> 1998-05-14

<313> delete

<400> ~~SEQ ID NO: #~~29

Met Gly His Tyr Thr Ile Ser Gly Ile Arg Phe Pro Cys Ala Pro Leu
1 5 10 15

Cys Lys Ser Gln Ser Thr Gly Phe His Gly Tyr Arg Arg Thr Ser Ser
20 25 30

Cys Leu Ser Phe Asn Phe Lys Glu Ala Phe Ser Arg Arg Val Phe Ser
35 40 45

Gly Lys Ser Ser His Glu Ser Asp Ser Ser Asn Val Met Val Thr Ala
50 55 60

```
Ser Lys Arg Val Leu Pro Asp Gly Arg Ile Glu Cys Tyr Ser Ser Ser
 65                  70                  75                  80

Thr Asp Gln Leu Glu Ala Pro Gly Thr Val Ser Glu Glu Ser Gln Val
                85                  90                  95

Leu Thr Asp Val Glu Ser Leu Ile Met Asp Asp Lys Ile Val Glu Asp
            100                 105                 110

Glu Val Asn Lys Glu Ser Val Pro Met Arg Glu Thr Val Ser Ile Arg
        115                 120                 125

Lys Ile Gly Ser Lys Pro Arg Ser Ile Pro Pro Pro Gly Arg Gly Gln
    130                 135                 140

Arg Ile Tyr Asp Ile Asp Pro Ser Leu Thr Gly Phe Arg Gln His Leu
145                 150                 155                 160

Asp Tyr Arg Tyr Ser Gln Tyr Lys Arg Leu Arg Glu Glu Ile Asp Lys
                165                 170                 175

Tyr Glu Gly Ser Leu Asp Ala Phe Ser Arg Gly Tyr Glu Lys Phe Gly
            180                 185                 190

Phe Ser Arg Ser Glu Thr Gly Ile Thr Tyr Arg Glu Trp Ala Pro Gly
        195                 200                 205

Ala Thr Trp Ala Ala Leu Ile Gly Asp Phe Asn Asn Trp Asn Pro Asn
    210                 215                 220

Ala Asp Val Met Thr Gln Asn Glu Cys Gly Val Trp Glu Ile Phe Leu
225                 230                 235                 240

Pro Asn Asn Ala Asp Gly Ser Pro Pro Ile Pro His Gly Ser Arg Val
                245                 250                 255

Lys Ile Arg Met Asp Thr Pro Ser Gly Asn Lys Asp Ser Ile Pro Ala
            260                 265                 270

Trp Ile Lys Phe Ser Val Gln Ala Pro Gly Glu Leu Pro Tyr Asn Gly
        275                 280                 285

Ile Tyr Tyr Asp Pro Pro Glu Glu Glu Lys Tyr Val Phe Lys Asn Pro
    290                 295                 300

Gln Pro Lys Arg Pro Lys Ser Leu Arg Ile Tyr Glu Ser His Val Gly
305                 310                 315                 320

Met Ser Ser Thr Glu Pro Val Ile Asn Thr Tyr Ala Asn Phe Arg Asp
                325                 330                 335

Asp Val Leu Pro Arg Ile Lys Lys Leu Gly Tyr Asn Ala Val Gln Leu
            340                 345                 350

Met Ala Ile Gln Glu His Ser Tyr Tyr Ala Ser Phe Gly Tyr His Val
        355                 360                 365
```

```
Thr Asn Phe Tyr Ala Ala Ser Ser Arg Phe Gly Thr Pro Asp Asp Leu
    370                 375                 380

Lys Ser Leu Ile Asp Lys Ala His Glu Leu Gly Leu Leu Val Leu Met
385                 390                 395                 400

Asp Ile Val His Ser His Ala Ser Thr Asn Thr Leu Asp Gly Leu Asn
                405                 410                 415

Met Phe Asp Gly Thr Asp Gly His Tyr Phe His Ser Gly Pro Arg Gly
            420                 425                 430

His His Trp Met Trp Asp Ser Arg Leu Phe Asn Tyr Gly Ser Trp Glu
        435                 440                 445

Val Leu Arg Phe Leu Leu Ser Asn Ala Arg Trp Trp Leu Asp Glu Tyr
    450                 455                 460

Lys Phe Asp Gly Phe Arg Phe Asp Gly Val Thr Ser Met Met Tyr Thr
465                 470                 475                 480

His His Gly Leu Gln Val Asp Phe Thr Gly Asn Tyr Asn Glu Tyr Phe
                485                 490                 495

Gly Tyr Ala Thr Asp Val Asp Ala Val Val Tyr Leu Met Leu Leu Asn
            500                 505                 510

Asp Met Ile His Gly Leu Phe Pro Glu Ala Val Thr Ile Gly Glu Asp
        515                 520                 525

Val Ser Gly Met Pro Thr Val Cys Ile Pro Val Glu Asp Gly Gly Val
    530                 535                 540

Gly Phe Asp Tyr Arg Leu His Met Ala Val Ala Asp Lys Trp Val Glu
545                 550                 555                 560

Ile Ile Gln Lys Arg Asp Glu Asp Trp Lys Met Gly Asp Ile Val His
                565                 570                 575

Met Leu Thr Asn Arg Arg Trp Leu Glu Lys Cys Val Ser Tyr Ala Glu
            580                 585                 590

Ser His Asp Gln Ala Leu Val Gly Asp Lys Thr Ile Ala Phe Trp Leu
        595                 600                 605

Met Asp Lys Asp Met Tyr Asp Phe Met Ala Leu Asp Arg Pro Ser Thr
    610                 615                 620

Pro Leu Ile Asp Arg Gly Val Ala Leu His Lys Met Ile Arg Leu Ile
625                 630                 635                 640

Thr Met Gly Leu Gly Gly Glu Gly Tyr Leu Asn Phe Met Gly Asn Glu
                645                 650                 655

Phe Gly His Pro Glu Trp Ile Asp Phe Pro Arg Gly Asp Leu His Leu
            660                 665                 670
```

09/29/03 7

```
Pro Ser Gly Lys Phe Val Pro Gly Asn Asn Tyr Ser Tyr Asp Lys Cys
        675                 680                 685

Arg Arg Arg Phe Asp Leu Gly Asn Ser Lys His Leu Arg Tyr His Gly
    690                 695                 700

Met Gln Glu Phe Asp Gln Ala Ile Gln His Leu Glu Glu Ala Tyr Gly
705                 710                 715                 720

Phe Met Thr Ser Glu His Gln Tyr Ile Ser Arg Lys Asp Glu Arg Asp
                725                 730                 735

Arg Ile Ile Val Phe Glu Arg Gly Asn Leu Val Phe Val Phe Asn Phe
            740                 745                 750

His Trp Thr Ser Ser Tyr Ser Asp Tyr Arg Val Gly Cys Leu Lys Pro
        755                 760                 765

Gly Lys Tyr Lys Ile Val Leu Asp Ser Asp Asp Pro Leu Phe Gly Gly
    770                 775                 780

Phe Gly Arg Leu Ser His Asp Ala Glu His Phe Ser Phe Glu Gly Trp
785                 790                 795                 800

Tyr Asp Asn Arg Pro Arg Ser Phe Met Val Tyr Thr Pro Cys Arg Thr
                805                 810                 815

Ala Val Val Tyr Ala Leu Val Glu Asp Glu Val Glu Asn Glu Leu Glu
            820                 825                 830

Pro Val Ala Gly *
        835
```

Delete ending stop codon and adjust <2117> response

The types of errors shown exist <u>throughout</u> the Sequence Listing. Please check subsequent sequences for similar errors.

FYI

Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Please consult sample Sequence Listing (attached) for valid format.

<110> Smith, John; Smithgene Inc.

<120> Example of a Sequence Listing

<130> 01-00001

<140> PCT/EP98/00001
<141> 1998-12-31

<150> US 08/999,999
<151> 1997-10-15

<160> 4

<170> PatentIn version 2.0

<210> 1
<211> 389
<212> DNA
<213> Paramecium sp.

<220>
<221> CDS
<222> (279)...(389)

<300>
<301> Doe, Richard
<302> Isolation and Characterization of a Gene Encoding a Protease from Paramecium sp.
<303> Journal of Genes
<304> 1
<305> 4
<306> 1-7
<307> 1988-06-31
<308> 123456
<309> 1988-06-31

<400> 1

agctgtagtc attcctgtgt cctcttctct ctgggcttct caccctgcta atcagatctc 60

agggagagtg tcttgaccct cctctgcctt tgcagcttca caggcaggca ggcaggcagc 120

tgatgtggca attgctggca gtgccacagg cttttcagcc aggcttaggg tgggttccgc 180

cgcggcgcgg cggccctct cgcgctcctc tcgcgcctct ctctcgctct cctctcgctc 240

```
ggacctgatt  aggtgagcag  gaggaggggg  cagttagc      atg  gtt  tca  atg  ttc  agc   296
                                                  Met  Val  Ser  Met  Phe  Ser
                                                   1                   5

ttg  tct  ttc  aaa  tgg  cct  gga  ttt  tgt  ttg  ttt  gtt  tgt  ttg  ttc  caa   344
Leu  Ser  Phe  Lys  Trp  Pro  Gly  Phe  Cys  Leu  Phe  Val  Cys  Leu  Phe  Gln
               10                        15                  20

tgt  ccc  aaa  gtc  ctc  ccc  tgt  cac  tca  tca  ctg  cag  ccg  aat  ctt       389
Cys  Pro  Lys  Val  Leu  Pro  Cys  His  Ser  Ser  Leu  Gln  Pro  Asn  Leu
          25                        30                  35
```

<210> 2
<211> 37
<212> PRT
<213> Paramecium sp.

<400> 2

Met	Val	Ser	Met	Phe	Ser	Leu	Ser	Phe	Lys	Trp	Pro	Gly	Phe	Cys	Leu
1				5					10					15	

Phe	Val	Cys	Leu	Phe	Gln	Cys	Pro	Lys	Val	Leu	Pro	Cys	His	Ser	Ser
			20					25					30		

Leu	Gln	Pro	Asn	Leu
		35		

<210> 3
<211> 11
<212> PRT
<213> Artificial Sequence

<220>
<223> Designed peptide based on size and polarity to act as a linker between the alpha and beta chains of Protein XYZ.

<400> 3

Met	Val	Asn	Leu	Glu	Pro	Met	His	Thr	Glu	Ile
1				5					10	

<210> 4
<400> 4
000

identifiers and their accompanying information as shown in the following table. The numeric identifier shall be used only in the "Sequence Listing." The order and presentation of the items of information in the "Sequence Listing" shall conform to the arrangement given below. Each item of information shall begin on a new line and shall begin with the numeric identifier enclosed in angle brackets as shown. The submission of those items of information designated with an "M" is mandatory. The submission of those items of information designated with an "O" is optional. Numeric identifiers <110> through <170> shall only be set forth at the beginning of the "Sequence Listing." The following table illustrates the numeric identifiers.

Numeric Identifier	Definition	Comments and Format	Mandatory (M) or Optional (O)
<110>	Applicant	Preferably max. of 10 names; one name per line; preferable format: Surname, Other Names and/or Initials	M
<120>	Title of Invention		M
<130>	File Reference	Personal file reference	M when filed prior to assignment of appl. number
<140>	Current Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if available
<141>	Current Filing Date	Specify as: yyyy-mm-dd	M, if available
<150>	Prior Application Number	Specify as: US 07/999,999 or PCT/US96/99999	M, if applicable include priority documents under 35 USC 119 and 120
<151>	Prior Application Filing Date	Specify as: yyyy-mm-dd	M, if applicable
<160>	Number of SEQ ID NOs	Count includes total number of SEQ ID NOs	M
<170>	Software	Name of software used to create the Sequence Listing	O
<210>	SEQ ID NO:#:	Response shall be an integer representing the SEQ ID NO shown	M
<211>	Length	Respond with an integer expressing the number of bases or amino acid residues	M

<212>	Type	Whether presented sequence molecule is DNA, RNA, or PRT (protein). If a nucleotide sequence contains both DNA and RNA fragments, the type shall be "DNA." In addition, the combined DNA/RNA molecule shall be further described in the <220> to <223> feature section.	M
<213>	Organism	Scientific name, i.e. Genus/species, Unknown or Artificial Sequence. In addition, the "Unknown" or "Artificial Sequence" organisms shall be further described in the <220> to <223> feature section.	M
<220>	Feature	Leave blank after <220>. <221-223> provide for a description of points of biological significance in the sequence.	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<221>	Name/Key	Provide appropriate identifier for feature, preferably from WIPO Standard ST.25 (1998), Appendix 2, Tables 5 and 6	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence
<222>	Location	Specify location within sequence; where appropriate state number of first and last bases/amino acids	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified

		in feature	base was used in a sequence
<223>	Other Information	Other relevant information; four lines maximum	M, under the following conditions: if "n," "Xaa," or a modified or unusual L-amino acid or modified base was used in a sequence; if ORGANISM is "Artificial Sequence" or "Unknown"; if molecule is combined DNA/RNA.
<300>	Publication Information	Leave blank after <300>	O
<301>	Authors	Preferably max of ten named authors of publication; specify one name per line; preferable format: Surname, Other Names and/or Initials	O
<302>	Title		O
<303>	Journal		O
<304>	Volume		O
<305>	Issue		O
<306>	Pages		O
<307>	Date	Journal date on which data published; specify as yyyy-mm-dd, MMM-yyyy or Season-yyyy	O
<308>	Database Accession Number	Accession number assigned by database including database name	O
<309>	Database Entry Date	Date of entry in database; specify as yyyy-mm-dd or MMM-yyyy	O
<310>	Patent Document Number	Document number; for patent-type citations only. Specify as, for example, US 07/999,999	O

<311>	Patent Filing Date	Document filing date, for patent-type citations only; specify as yyyy-mm-dd	O
<312>	Publication Date	Document publication date, for patent-type citations only; specify as yyyy-mm-dd	O
<313>	Relevant Residues	FROM (position) TO (position)	O
<400>	Sequence	SEQ ID NO should follow the numeric identifier and should appear on the line preceding the actual sequence	M

5. Section 1.824 is revised to read as follows:

1.824 Form and format for nucleotide and/or amino acid sequence submissions in computer readable form.

(a) The computer readable form required by 1.821(c) shall meet the following specifications:

(1) The computer readable form shall contain a single "Sequence Listing" as either a diskette, series of diskettes, or other permissible media outlined in paragraph (c) of this section.

(2) The "Sequence Listing" in paragraph (a) (1) of this section shall be submitted in American Standard Code for Information Interchange (ASCII) text. No other formats shall be allowed.

(3) The computer readable form may be created by any means, such as word processors, nucleotide/amino acid sequence editors or other custom computer programs; however, it shall conform to all specifications detailed in this section.

(4) File compression is acceptable when using diskette media, so long as the compressed file is in a self-extracting format that will decompress on one of the systems described in paragraph (b) of this section.

(5) Page numbering shall not appear within the computer readable form version of the "Sequence Listing" file.

(6) All computer readable forms shall have a label permanently affixed thereto on which has been hand-printed or typed: the name of the applicant, the title of the invention, the date on which the data were recorded on the computer readable form, the operating system used, a reference number, and an application serial number and filing date, if known.

(b) Computer readable form submissions must meet these format requirements:

(1) Computer: IBM PC/XT/AT, or compatibles, or Apple Macintosh;

(2) Operating System: MS-DOS, Unix or Macintosh;